

### **Environmental Summit II**

## CIVIL WORKS PROJECTS

# HOW THEY HAPPEN with emphasis on Ecosystem Restoration

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### Six Steps to a Civil Works Project

- Perception of a Problem: Locals see water & related land resource problem.
- Request for Federal Assistance: Might there be some Federal interest? Is there a program or "continuing authority" to look at the problem? Is new authority from Congress necessary?

### Steps to a Civil Works Project, #3

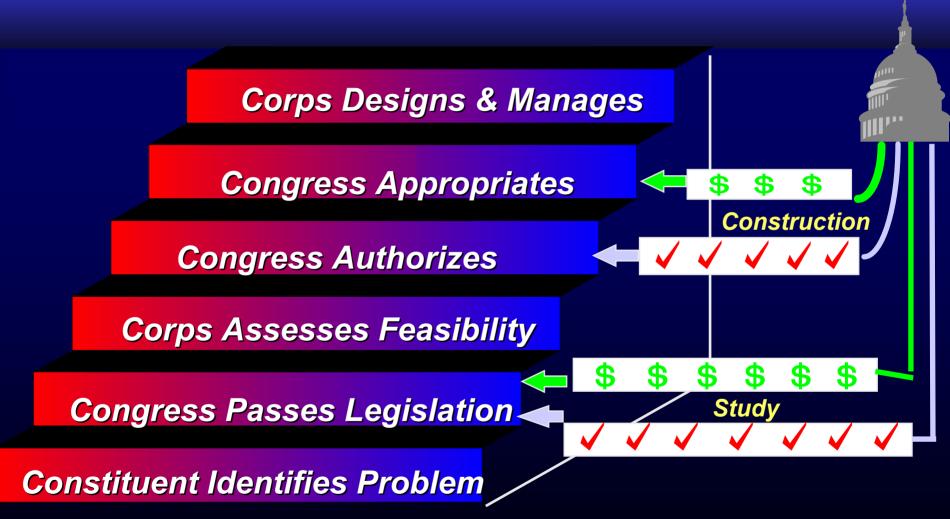
- Study Problem and Report Preparation:
  - Reconnaissance Study: 100% Federal cost
    - Is full study warranted?
  - Feasibility Study: Non-Feds pay 50%
    - Is there an environmentally acceptable, technically sound, and economically feasible solution?

### Last Steps to a Civil Works Project

- Report Review and Approval.
  - Final feasibility report/EIS with Chief's report
  - HQUSACE to ASA(CW) to OMB to Congress
  - PED often continues

- Congressional Authorization.
- Project Implementation.

## Steps to a Specifically Authorized Project



### **Use of Programmatic Authorities**

- Continuing Authority Program (CAP) can sometimes be used to avoid the need to go to Congress.
  - Otherwise the same basic processes
  - Tight funding limits
  - Other restrictions

### **At Best, A Complicated Process**

- Elaborate interactions with non-Federal sponsor, with publics, with Congress, with other agencies.
- There are lots of opportunities for delay due to funding, changing priorities & conditions, and procedural matters before even getting to planning & design and before dealing with environmental complications.

### **The Planning Process**

### Consists the following major steps:

- (1) Specification of the water and related land resources problems and opportunities (relevant to the planning setting) associated with the Federal objective and specific State and local concerns.
- (2) Inventory, forecast and analysis of water and related land resource conditions within the planning area relevant to the identified problems and opportunities.

### **The Planning Process**

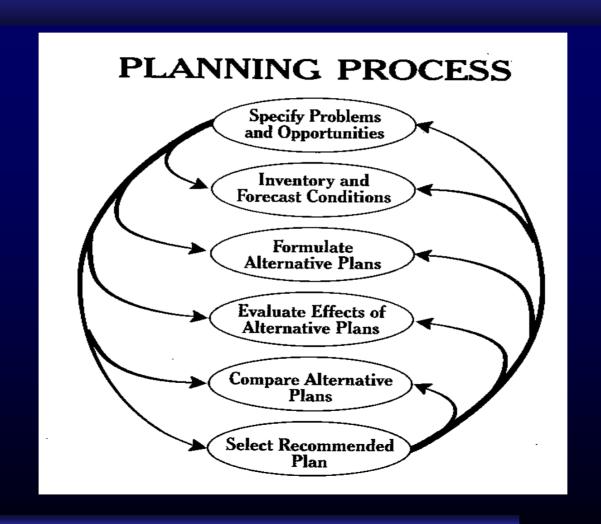
(3) Formulation of alternative plans.

(4) Evaluation of the effects of the alternative plans.

(5) Comparison of alternative plans.

(6) Selection of a recommended plan based upon the comparison of alternative plans.

### The Iterative Planning Process



### Features of Civil Works Projects

- RELATIONSHIP WITH CUSTOMER is collaborative.
- MULTIPLE CUSTOMERS to please.
- COST SHARING is required with a non-Federal sponsor.
- PROCESSES are defined by law and regulations.
- ENVIRONMENTAL: more planning than compliance.
- DECISIONMAKER is in our chain of command

### **Environmental Summit II**

**Ecosystem Restoration in Civil Works** 

### Intent of the rest of this presentation:

- Describe Corps ecosystem restoration authorities.
- List the types of projects that can be implemented.
- Identify some limitations of these authorities.
- Describe cost sharing and policies.

### **Ecosystem Restoration Objective**

- Restore degraded significant ecosystem structure, function, and dynamic processes to a less degraded, more natural condition.
  - Improve or re-establish structural components and functions of natural areas
  - Mimic, as closely as possible, conditions, which would occur in the area in the absence of human changes to the landscape and hydrology

# **Ecosystem Restoration:**Related Concepts

- Enhancement
- Environmental Restoration
- Conservation
- Rehabilitation
- Protection
- Preservation
- Mitigation
- Stewardship

# **Evolution Towards Ecosystem**Restoration Authorities and Policies

- No mitigation
- Mitigation incorporated into project plans
- Restoration linked to past Corps projects
- Restoration of other degraded water resources
- Regional programs
- Formulate comprehensive plans with restoration and NED purposes

### **Ecosystem Restoration Authorities**

Specifically authorized studies

Programmatic authorities

Additional restoration opportunities

# Specifically Authorized Studies/Projects

- Single purpose
- Multiple purpose
- Review of completed projects
- Study Cost Sharing 50/50
- Construction cost sharing 35% non-Federal which includes lands

## **Programmatic Authorities**

### Important Variables

- Limits on authorities
- Is linkage to a Corps project needed?
- Are lands needed?
- Size of the problem
- Sponsor's capability

## **Programmatic Authorities**

 Project modification for improvement of the environment (1135)

Aquatic Ecosystem Restoration (206)

Beneficial use of dredged material (204)

## Project Modifications for Improvement of the Environment Section 1135 of WRDA 1986, Amended

#### Purpose

 Modify Federal projects to improve the environment ("Federal" in this case includes Corps projects and/or Corps participation in the original Federal project)

#### Constraint

Consistent with authorized project purposes

### Non-Federal Cost-Sharing

- 25 percent of the implementation cost including lands, easements, rights-of-way, relocations, and disposal areas (LERRD)
- 100 percent of operation and maintenance
- 80 percent of the non-Federal share may be work-in-kind

## Aquatic Ecosystem Restoration Section 206 of WRDA 1996

- Purpose
  - Aquatic ecosystem restoration that improve environment
- Non-Federal Cost-Sharing
  - 35 percent of the cost of implementation which includes lands, easements, rights-of-way, relocations, and disposal areas
  - 100 percent of OMRR&R
  - 100 percent of the non-Federal share may be workin-kind

# Beneficial Use of Dredged Material Section 204 of WRDA 1992, Amended

- Purpose
  - Habitat restoration using dredged material
- Base plan
  - Least costly disposal method
- Non-Federal Cost-sharing
  - 25 percent of construction cost above the base plan
  - 100 percent of OMRR&R for ecosystem restoration
  - No credit allowed for work-in-kind

# Placement of Dredge Material on Beaches (Section 145, WRDA 1976)

- Purpose
  - Placement of dredged material on beaches
- Non-Federal Cost-Sharing
  - 35% (WRDA 1996) of the incremental cost over the cost of the least costly method of disposal when placement is to obtain economic outputs

## Section 312, WRDA 1990, Environmental Dredging as Amended by Section 224 WRDA 1999

### Purpose

- Removal and remediation of contaminated sediments from Navigable waters
- Applies to non-CERCLA sites
- Non-Federal Cost-Sharing
  - Normal O&M project cost sharing when project related
  - 35% when not project related but in navigable waters

## **Federal Funding Limits**

Authority	Project	Annual
Section 1135	\$5 million	\$25 million
Section 206	\$5 million	\$25 million
Sections 204	none	\$15 million
Section 312	none	\$20 million

## Additional Ecosystem Restoration Authorities

 Section 906 of WRDA 1986 – Fish and Wildlife Mitigation and Enhancement

 Section 907 of WRDA 1986 – Benefits and Costs Attributable to Environmental Measures

 Section 306 of WRDA 1990 – Environmental Protection Mission

# Additional Ecosystem Restoration Authorities (Cont.)

- Section 307 of WRDA 1990 Wetlands
- Section 203 of WRDA 1992 Voluntary
  Contributions for Environmental and Recreation
  Projects
- Section 210 of WRDA 96 Cost Sharing for Environmental Projects
- Section 212 of WRDA 99 (Challenge XXI)
  - Flood mitigation and riverine restoration program

## How is Plan Formulation for Restoration Different?

- It makes environmental improvement an objective
- The ultimate design is not of human origin
- The ultimate design is self-maintaining
- We can facilitate but not dictate restoration
- Policy constraints differ

### **Policy Considerations**

- The project should restore ecosystem structure, functions and values
- The project should result in improved environmental quality
- The improvement should be of great enough national significance to justify federal expenditure

### **Policy Considerations**

- The sum of all monetary and non-monetary benefits should exceed the sum of all monetary and non-monetary costs
- The measures taken to improve environmental quality should result in a more naturalistic and self-regulating system
- The measures should reestablish to the extent possible a close approximation of preexisting conditions

# **Ecosystem Restoration Policies: Highlights**

- Ecosystem restoration is a priority mission
- Systems context
- Avoid need for mitigation
- Public interest
- Land acquisition
- Water quality
- Recreation
- Monitoring and adaptive management
- Applying Corps expertise
- Operational effectiveness

## **Take Away Points**

- Ecosystem Restoration is a high budgetary priority
- Program more than the sum of its parts
- Many authorities
- There are limitations
- Creativity pays off

### **Questions and Discussion**

### Russian River Coho Salmon Recovery Program

## Welcome to the Congressman DON CLAUSEN FISH HATCHERY

This is one of the most modern hatcheries in California. It was designed for visitors to view operations from balconies on this floor, and from alongside the fish ladder and raceways outside.

There are signs at each area to explain what happens there. Each stop has a special symbol to help orient you. The symbols are:



There are also several exhibits in this building that illustrate the hatchery process and the life cycle of the fish that come upstream to spawn here.

To start your tour, we suggest you take a look at a short video program about the hatchery. To start the show, press the button between the two monitors.

